## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Source:

Date Processed by STIC:

Application Serial Number: 10/5/6, 603

ENTERED



PCT

RAW SEQUENCE LISTING DATE: 12/17/2004
PATENT APPLICATION: US/10/516,603 TIME: 15:09:42

Input Set : A:\14875-137US1.txt

```
3 <110> APPLICANT: Kodama, Tatsuhiko
              Jishage, Kou-ichi
              Kamada, Nobuo
      5
              Yamada, Yoshiki
      8 <120> TITLE OF INVENTION: METHODS FOR PRODUCING ANTIBODIES
     10 <130> FILE REFERENCE: 14875-137US1
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/516,603
C--> 12 <141> CURRENT FILING DATE: 2004-12-03
     12 <150> PRIOR APPLICATION NUMBER: PCT/JP03/07071
     13 <151> PRIOR FILING DATE: 2003-06-04
     15 <150> PRIOR APPLICATION NUMBER: JP 2002-164834
     16 <151> PRIOR FILING DATE: 2002-06-05
     18 <150> PRIOR APPLICATION NUMBER: JP 2002-180351
     19 <151> PRIOR FILING DATE: 2002-06-20
     21 <160> NUMBER OF SEQ ID NOS: 4
     23 <170> SOFTWARE: PatentIn Ver. 2.1
     25 <210> SEQ ID NO: 1
     26 <211> LENGTH: 28
    27 <212> TYPE: DNA
    28 <213> ORGANISM: Artificial Sequence
     30 <220> FEATURE:
    31 <223> OTHER INFORMATION: Description of Artificial Sequence:an artificially
              synthesized primer sequence
     34 <400> SEQUENCE: 1
     35 gaattccacc atggtaagcg ctattgtt
                                                                           28
     38 <210> SEQ ID NO: 2
    39 <211> LENGTH: 26
     40 <212> TYPE: DNA
    41 <213> ORGANISM: Artificial Sequence
    43 <220> FEATURE:
    44 <223> OTHER INFORMATION: Description of Artificial Sequence: an artificially
              synthesized primer sequence
    47 <400> SEQUENCE: 2
                                                                           26
    48 gaattettaa tattgtetat taeggt
    51 <210> SEQ ID NO: 3
    52 <211> LENGTH: 1539
    53 <212> TYPE: DNA
    54 <213> ORGANISM: Baculovirus
    56 <220> FEATURE:
    57 <221> NAME/KEY: CDS
    58 <222> LOCATION: (1)..(1539)
    60 <400> SEQUENCE: 3
    61 atg gta age get att gtt tta tat gtg ett ttg geg geg geg geg cat
```

Input Set : A:\14875-137US1.txt

62 63	Met 1	Val	Ser	Ala	Ile 5	Val	Leu	Tyr	Val	Leu 10	Leu	Ala	Ala	Ala	Ala 15	His	
65	tct	gcc	ttt	gcg	gcg	gag	cac	tgc	aac	gcg	caa	atg	aag	acg	ggt	ccg	96
66	Ser	Ala	Phe	Ala	Ala	Glu	His	Cys	Asn	Ala	Gln	Met	Lys	Thr	Gly	Pro	
67				20					25					30			
69	tac	aag	att	aaa	aac	ttg	gac	att	acc	ccg	CCC	aag	gaa	acg	ctg	caa	144
70	Tyr	Lys	Ile	Lys	Asn	Leu	Asp	Ile	Thr	Pro	Pro	Lys	Glu	Thr	Leu	Gln	
71			35					40					45				
73	aag	gac	gtg	gaa	atc	acc	atc	gtg	gag	acg	gac	tac	aac	gaa	aac	gtg	192
74	Lys	Asp	Val	Glu	Ile	Thr	Ile	Val	Glu	Thr	Asp	Tyr	Asn	Glu	Asn	Val	
75		50					55					60					
77	att	atc	ggc	tac	aag	ggg	tac	tac	cag	gcg	tat	gcg	tac	aac	ggc	ggc	240
78	Ile	Ile	Gly	Tyr	Lys	Gly	Tyr	Tyr	Gln	Ala	Tyr	Ala	Tyr	Asn	Gly	Gly	
79	65					70					75					80	
81	tcg	ctg	gat	CCC	aac	aca	.cgc	gtc	gaa	gaa	acc	atg	aaa	acg	ctg	aat	288
82	Ser	Leu	Asp	Pro	Asn	Thr	Arg	Val	Glu	Glu	Thr	Met	Lys	Thr	Leu	Asn	
83					85					90					95		
85	gtg	ggc	aaa	gag	gat	ttg	ctt	atg	tgg	agc	atc	agg	cag	cag	tgc	gag	336
86	Val	Gly	Lys	Glu	Asp	Leu	Leu	Met	Trp	Ser	Ile	Arg	Gln	Gln	Cys	Glu	
87				100					105					110			
89	gtg	ggc	gaa	gag	ctg	atc	gac	cgt	tgg	ggc	agt	gac	agc	gac	gac	tgt	384
90	Val	Gly	Glu	Glu	Leu	Ile	Asp	Arg	Trp	Gly	Ser	Asp	Ser	Asp	Asp	Cys	
91			115					120					125				
93	ttt	cgc	gac	aac	gag	ggc	cgc	ggc	cag	tgg	gtc	aaa	ggc	aaa	gag	ttg	432
94	Phe	Arg	Asp	Asn	Glu	Gly	Arg	Gly	Gln	Trp	Val	Lys	Gly	Lys	Glu	Leu	
95		130					135					140					
				cag													480
98	Val ·	Lys	Arg	Gln	Asn	Asn	Asn	His	Phe	Ala	His	His	Thr	Cys	Asn	Lys	
	145					150					155					160	
																gag	528
102	2 Ser	Tr	Arg	g Cys	_		Ser	Thr	Ser	_		Ty:	r Sei	c Arg		ı Glu	
103					165					170					179		
																gag	576
	_	Gli	ı Ası	_		Asp	Glu	Суз			. Tyr	: Ile	e Lei	_		a Glu	
107				180					185					190			
																ggc	624
	_	Ası			Asr	ı Val	Thr		_	Thi	. Val	. Let			j Asj	Gly	
111			195					200					205				
		, ,	-	-				_	•	-	•		-	_		a ata	672
				: Ile	Let	ı Lys			Ser	Thi	: Phe			r Arg	g GL	ı Ile	
115		210					215					220					
																tcg	720
	_		a Ala	a Cys	Let			гуз	Asp	Asp	_		ı Ası	ı Pro	GI	Ser	
	225					230					235					240	2.55
		-	-	_		_	_		_		_			_		tct	768
		. Thi	Arg	g GIu		_	Leu	ııe	Asp		_	) ITE	з Туг	Ası		ı Ser	
123					245					250					255		0.7.6
																gtc	816
126	Lys	: Asr	Thi	: Trp	Asr	. Cys	Lys	Phe	Asn	Arg	Cys	: 116	Э Гуя	arç	ј Гу	3 Val	

Input Set : A:\14875-137US1.txt

127				260					265					270			
			cga														864
	Glu	His	Arg	Val	Lys	Lys	Arg		Pro	Thr	Trp	Arg		Asn	Val	Arg	
131			275					280					285				
			tac														912
134	Ala	Lys	Tyr	Thr	Glu	Gly	Asp	Thr	Ala	Thr	Lys	Gly	Asp	Leu	Met	His	
135		290					295					300					
137	att	caa	gag	gag	ctg	atg	tac	gaa	aac	gat	ttg	ctg	aaa	atg	aac	att	960
138	Ile	Gln	Glu	Glu	Leu	Met	Tyr	Glu	Asn	Asp	Leu	Leu	Lys	Met	Asn	Ile	
139	305					310					315					320	
141	gag	ctg	atg	cat	gcg	cac	atc	aac	aag	cta	aac	aat	atg	ctg	cac	gac	1008
142	Glu	Leu	Met	His	Ala	His	Ile	Asn	Lys	Leu	Asn	Asn	Met	Leu	His	Asp	
143					325					330					335		
145	ctg	ata	gtc	tcc	gtg	gcc	aag	gtg	gac	gag	cgt	ttg	att	ggc	aat	ctc	1056
			Val														
147				340			_		345		_			350			
149	atg	aac	aac	tct	gtt	tct	tca	aca	ttt	ttg	tcg	gac	gac	acg	ttt	ttg	1104
	_		Asn		_					_	_	_	-	_		_	
151			355					360				-	365				
153	ctq	atq	ccg	tqc	acc	aat	ccq	ccq	qca	cac	acc	aqt	aat	tqc	tac	aac	1152
			Pro														
155		370		•			375					380		•	•		
157	aac	aqc	atc	tac	aaa	qaa	qqq	cqt	tqq	ata	qcc	aac	acq	qac	tcq	tcq	.1200
			Ile														
	385			•	•	390	•		-		395			-		400	
161	caa	tqc	ata	qat	ttt	aqc	aac	ťac	aaq	qaa	cta	qca	att	qac	qac	qac	1248
		_	Ile	_		_			_	_		_		_	_	-	
163		-		-	405			•	•	410				-	415	•	
165	qtc	qaq	ttt	tgg	atc	ccq	acc	atc	qqc	aac	acq	acc	tat	cac	gac	aqt	1296
			Phe														
167				420					425				•	430	•		
169	tqq	aaa	gat	qcc	aqc	qqc	tqq	tcq	ttt	att	qcc	caa	caa	aaa	aqc	aac	1344
			Asp														
171	-	•	435			•	-	440					445	•			
173	ctc	ata	acc	acc	atq	qaq	aac	acc	aaq	ttt	qqc	qqc	qtc	qqc	acc	aqt	1392
			Thr														
175		450					455		•		•	460		•			
177	ctq	agc	gac	atc	act	tcc	atq	qct	qaa	qqc	qaa	ttq	qcc	qct	aaa	ttq	1440
			Asp														
	465					470				-	475				•	480	
		tca	ttc	atq	ttt		cat	qta	att	aac		qta	att	ata	tta		1488
			Phe	_				-	_			_					
183					485	2				490					495		
	ata	att	tta	ttt		tac	tat	atq	att		aac	cat	aat	aga		tat	1536
			Leu														
187				500		-1-	-1-		505	3		3		510		-1-	
	taa																1539
		)> SF	EQ II	NO.	4												
			ENGTH														
	~~ ~ .	41															

Input Set : A:\14875-137US1.txt

195	<212	2 > T	YPE:	PRT												
196	<21	3 > O	RGAN	ISM:	Baculovirus											
198	<40	0 > S	EQUE	NCE:	4											•
199	Met	Val	Ser	Ala	Ile	Val	Leu	Tyr	Val	Leu	Leu	Ala	Ala	Ala	Ala	His
200	1				5					10					15	
201	Ser	Ala	Phe	Ala	Ala	Glu	His	Cys	Asn	Ala	Gln	Met	Lys	Thr	Gly	Pro
202				20					25					30		
203	Tyr	Lys	Ile	Lys	Asn	Leu	Asp	Ile	Thr	Pro	Pro	Lys	Glu	Thr	Leu	Gln
204			35					40					45			
205	Lys	Asp	Val	Glu	Ile	Thr	Ile	Val	Glu	Thr	Asp	Tyr	Asn	Glu	Asn	Val
206		50		•			55					60				
207	Ile	Ile	Gly	Tyr	Lys	Gly	Tyr	Tyr	Gln	Ala	Tyr	Ala	Tyr	Asn	Gly	Gly
208	65					70					75					80
209	Ser	Leu	Asp	Pro	Asn	Thr	Arg	Val	Glu	Glu	Thr	Met	Lys	Thr	Leu	Asn
210					85					90					95	
211	Val	Gly	Lys	Glu	Asp	Leu	Leu	Met	Trp	Ser	Ile	Arg	Gln	Gln	Cys	Glu
212				100					105					110		
213	Val	Gly	Glu	Glu	Leu	Ile	Asp	Arg	Trp	Gly	Ser	Asp	Ser	Asp	Asp	Cys
214			115					120					125			
215	Phe	Arg	Asp	Asn	Glu	Gly	Arg	Gly	Gln	Trp	Val	Lys	Gly	Lys	Glu	Leu
216		130					135					140				
217	Val	Lys	Arg	Gln	Asn	Asn	Asn	His	Phe	Ala	His	His	Thr	Cys	Asn	Lys
218	145			•		150					155					160
219	Ser	Trp	Arg	Cys	Gly	Ile	Ser	Thr	Ser	Lys	Met	Tyr	Ser	Arg	Leu	Glu
220					165					170					175	
221	Cys	Gln	Asp	Asp	Thr	Asp	Glu	Cys	Gln	Val	Tyr	Ile	Leu	Asp	Ala	Glu
222				180					185					190		
223	Gly	Asn	Pro	Ile	Asn	Val	Thr	Val	Asp	Thr	Val	Leu	His	Arg	Asp	Gly
224			195					200					205			
225	Val	Ser	Met	Ile	Leu	Lys	Gln	Lys	Ser	Thr	Phe	Thr	Thr	Arg	Gln	Ile
226		210					215					220				
227	Lys	Ala	Ala	Cys	Leu		Ile	Lys	Asp	Asp	_	Asn	Asn	Pro	Glu	Ser
	225			_		230					235	_				240
	Val	Thr	Arg	Glu		Cys	Leu	Ile	Asp		Asp	Ile	Tyr	Asp		Ser
230					245					250			_	_	255	
	Lys	Asn	Thr	_	Asn	Cys	Lys	Phe		Arg	Cys	He	Lys	Arg	Lys	Val
232			_	260	_	_	_	_	265		_	_		270		_
	Glu	His		Val	Lys	Lys	Arg		Pro	Thr	Trp	Arg		Asn	Val	Arg
234		_	275				_	280			_		285	_		
			Tyr	Thr	Glu	GIY		Thr	Ala	Thr	Lys		Asp	Leu	Met	His
236		290			_		295		_	_	_	300	_		_	
		Gln	Glu	Glu	Leu		Tyr	Glu	Asn	Asp		Leu	Lys	Met	Asn	Ile
238		_				310		_	-	-	315			<b>-</b> .		320
	Glu	Leu	Met	His		His	пе	Asn	ьуs		Asn	Asn	Met	Leu		Asp
240	_			_	325		_			330		_		~7	335	-
	ьeu	Пе	val		vai	Ата	ьуѕ	vai		GIU	Arg	ьeu	тте	Gly	Asn	∟eu
242				340	•••	٥.		m).	345	• .	G			350	DI:	T
	Met	Asn		ser	vaı	ser	ser		rne	ьeu	ser	Asp	_	Thr	rne	ьeu
244			355					360					365			

Input Set : A:\14875-137US1.txt

245 246	Leu	Met 370	Pro	Сув	Thr	Asn	Pro 375	Pro	Ala	His	Thr	Ser 380	Asn	Cys	Tyr	Asn
	Asn 385	Ser	Ile	Tyr	Lys	Glu 390	Gly	Arg	Trp	Val	Ala 395	Asn	Thr	Asp	Ser	Ser 400
		Cys	Ile	Asp	Phe 405	Ser	Asn	Tyr	Lys	Glu 410	Leu	Ala	Ile	Asp	Asp 415	Asp
251 252	Val	Glu	Phe	Trp 420	Ile	Pro	Thr	Ile	Gly 425	Asn	Thr	Thr	Tyr	His 430	Asp	Ser
253 254	Trp	Lys	Asp 435	Ala	Ser	Gly	Trp	Ser 440	Phe	Ile	Ala	Gln	Gln 445	Lys	Ser	Asn
255 256	Leu	Ile 450	Thr	Thr	Met	Glu	Asn 455	Thr	Lys	Phe	Gly	Gly 460	Val	Gly	Thr	Ser
	Leu 465	Ser	Asp	Ile	Thr	Ser 470	Met	Ala	Glu	Gly	Glu 475	Leu	Ala <sub>.</sub>	Ala	Lys	Leu 480
259 260	Thr	Ser	Phe	Met	Phe 485	Gly	His	Val	Val	Asn 490	Phe	Val	Ile	Ile	Leu 495	Ile
261 262	Val	Ile	Leu	Phe 500	Leu	Tyr	Суѕ	Met	Ile 505	Arg	Asn	Arg	Asn	Arg 510	Gln	Tyr

VERIFICATION SUMMARY

DATE: 12/17/2004

PATENT APPLICATION: US/10/516,603

TIME: 15:09:43

Input Set : A:\14875-137US1.txt

Output Set: N:\CRF4\12172004\J516603.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date